



# MINI FREQUENCY CONVERTER FOR AVIATION

**This lightweight solid-state 400 Hz to 60 Hz Miniature Frequency Converter has been designed for commercial airborne application and is applied for razor outlets in all AIRBUS aeroplanes except A300 and A310.**

The unit converts aircraft primary AC power of 115 Volt, 400 Hz into 115 and 230 Volt, 60 Hz. As integrated within the lavatory module behind the service cabinet no extra protection is required and no housing is necessary. For other application (e.g. Crew Rest Compartment) the unit is available with enclosure as Model 4056A.

115 Volt and 230 Volt is available alternatively at the nine pole D-Sub (Pin) receptacle. The EMI filtering complies with RTCA/DO 160. Since it requires no forced air and operates with ordinary convection cooling it is absolutely maintenance-free.

The Converter is overload capable and short-circuit protected and has been qualified in accordance with latest AIRBUS-standards for interior equipment mainly based on RTCA/DO 160.

On request this Static Converter is available with 50 Hz output instead of 60 Hz. EUROATLAS maintains a 24/7 spare part delivery service for its Airborne Power Supplies.



## For Commercial Aircraft

### Standard Features

- Input PFC
- Short-circuit protected
- MTBUR: 100,000 FH
- DMC: 0.00165 US\$/FH
- Low weight and size

### Application

- Civil Aircraft

### Support Service

- Full Product Support
- AOG Service

### Options

- Available with housing as Model 4056A



## Electrical Specifications

### Input

Voltage.....	115 VAC, single phase
Surge Voltage.....	RTCA/DO-160 C (16.5.1.5/16.5.3.3)
Voltage Spikes.....	RTCA/DO-160 C, Cat. A
Frequency .....	350 to 800 Hz
Current Distortion .....	≤ 12%

### Output

Voltage.....	115/230 VAC, ± 4%, single phase
Frequency .....	60 Hz, ± 5 Hz
Power .....	10 VA/10 W
Overload .....	15 VA/1 min., 20 VA/1 sec.
Efficiency.....	≥ 89%

## Environmental Specification

Temperature Range .....	-15°C to +40°C (operation)
	-55°C to +85°C (storage)
Humidity .....	95% (RTCA/DO-160 C, Cat. A)
Shock .....	6 g/11 ms, all directions
	(RTCA/DO 160 C, Section 7)
Vibration .....	RTCA/DO 160 C, Section 8, Cat. A1
Altitude.....	15.000 feet
	(RTCA/DO 160 C, S.4, Cat. A1)
EMC.....	RTCA/DO 160 C, Sect. 20, Cat. U,
	Sect. 21, Cat. A

## Physical Characteristics

Dimensions.....	20 x 55 x 90 mm (HxWxD)
Weight.....	83 g
Interface .....	D-Sub, 9 pole Connector

## Design Characteristics

MTBF.....	≥ 140,000 Fh
Qualification.....	Fully qualified in accordance with equipment specification, based on RTCA/DO-160



Mini Frequency Converter, 10 VA, Model 4056A.